The Official Newsletter



### DEPARTMENT OF ANIMAL & AVIAN SCIENCES





Faculty Awards & Honors



**Campus Farm Makeover** 



Maryland 4-H Team 2010 National Champions



<u>fall 2010</u>

Our five acre Campus Farm is a focal point of our undergraduate program activities and is used extensively in teaching laboratories and in select courses. A small ewe flock is used in our undergraduate "Lamb Watch" course taught during the spring semester. We maintain a horse stable that supports our undergraduate program in Equine Science and the Institute of Applied Agriculture's Equine Management Program. The stable also plays host to the University of Maryland Equestrian Club, an student club with nearly 100 members which supports the care and use of the department's horses. Our Campus Farm includes 3 main barns, a riding area, a machine shed, an office building and poultry coop. These facilities were part of the original Animal Science Research Farm dating back to the time when the entire campus was an experimental farm. We are proud to be one of the few animal science departments with the presence of animals directly on campus. This is one of the most frequently cited reasons for undergraduate students selecting the University of Maryland Animal Science Program.

Continued...

## What's New?



The farm was recently given a fresh coat of traditional farmhouse red paint, which we think looks wonderful! Furthermore, we greatly appreciate all of the generous donations and gifts to support the continued operation of our campus farm. We believe the farm is an essential part of our department's history and also our future.

The Department's fall tradition was once again a tremendous success. Students sampled and graded dozens of mouth-watering dishes prepared by the faculty and staff. This annual event is always a lot of fun for the faculty and staff; it has even been known to spawn intense rivalries! It also gives the students the rare opportunity to "grade" their teachers. After all the food was eaten, the votes were tallied and our champions were crowned!

The winners are: Side Dish

- **1. Ed Orlando -** The Barefoot Professor's Pasta Salad
- 2. Mark Varner Old Line Maryland Baked Apples
- 3. Janice Barber Fiesta Chili Dip



#### Main Dish

- **1. Brian Bequette -** Italian Roast Beef (A-Roman Manzo)
- 2. Carol Keefer Tasty BBQ Bites
- **3. Sarah Balcom** Best Annapolitan Old-Bay in a New Way Crab Mac 'n Cheese

#### Dessert

- 1. Angela Black Mango Sticky Rice
- 2. Rick Kohn Maryland Bars
- 3. Bob Peters Bob's Oreo Truffles

We would like to give a big thank you to everyone who participated in this year's Cook-off!

## fall 2010

## What's New?

#### Farewell and Welcome

On June 30, 2010, Edith Silvious retired from the position of Administrative Assistant to the Graduate Studies Office after 17 years in the department. Edith first came to work at the University of Maryland in January, 1990. A party was held in her honor on October 14. We will miss her and wish her the best!

On that note, we would like to welcome Andrea Junek to the department. Andrea is our new Graduate Program Coordinator and comes to us from across campus where she previously worked with the Office of Information Technology. Ms. Junek is a graduate of the University of Maryland with a degree in Linguistics.

We also have a new Lecturer this semester. Dr. Sarah Balcom has come aboard as our new Animal Health and Care instructor. Dr. Balcom received both her MS and DVM from Tufts, where she was a Foster Scholar. She practices small animal medicine at a clinic in Annapolis, but will be teaching full time during the academic year. Dr. Balcom has 3 cats and hopes to eventually persuade her husband into getting a dog.



Please join us in welcoming our newest staff members!







### Faculty News



Dr. Iqbal Hamza receives Kirwan Prize

Dr. Iqbal Hamza was awarded the prestigious 2010 Kirwan Faculty Research and Scholarship Prize. The Kirwan Prize recognizes a faculty member for a highly significant work of research, scholarship, or artistic creativity completed within the last three years. The award recognizes his "pioneering work on the discovery of genes that encode heme transporters which are essential for the ingestion of heme and which will lay the groundwork for understanding disorders such as anemia and genetic hematological diseases". Dr. Hamza is the first biologist on campus to receive this prize. A list of previous award winners can be found at http://www.gradschool.umd.edu/Fellowship/KirwanWinners.htm.

### fall 2010

## Faculty News



#### Erdman Elected to American Dairy Science Association Board of Directors

r. Rich Erdman, Professor of Animal and Avian Sciences was recently elected to a 3-year term representing the Production Division on the Board of Directors of the American Dairy Science Association (ADSA). ADSA, founded in 1906, has a membership of 4500 members representing 3 divisions Dairy Foods, Production, and the Student Affiliate Division (SAD). The official journal of ADSA, the Journal of Dairy Science (JDS) was established in 1917 and in 2010 is publishing its 93rd volume. JDS continues to be ranked among the top five journals in the agriculture, dairy and animal science category. Erdman, now in his 31st year as a faculty member at the University Maryland, joined the former Dairy Science Department in 1979 and has been a member of ADSA since 1976. He served as Chair of the Animal and Avian Sciences Department from 1999 to 2007. He teaches undergraduate courses in applied animal nutrition and dairy cattle management. He was a member of the National Research Council subcommittee that wrote the 7th revised edition of The Nutrient Requirements of Dairy Cattle published in 2001 by the National Academy of Sciences. Dr. Erdman's research has been published in more than 80 journal articles, 110 abstracts, 55 conference proceedings and popular press articles.

### Zimmermann honored by American Poultry Historical Society

Our own Dr. Nick Zimmermann recently received the American Poultry Historical Society Award. This award is made to stimulate interest in documenting and recording historical information about the poultry industry development, to preserve artifacts and other items of historical interest to the poultry industry, and to encourage the publication of recorded historical information in papers and books.

Nickolas Zimmermann is an associate professor in the department and earned his BS and MS degrees in poultry science from the University of Wisconsin-Madison. Nick was awarded a joint PhD in poultry science and veterinary science from the same institution in 1981. His current research interests include drinking water quality, nutrient management, and environmental lighting.



continued...

# Faculty News

#### Zimmermann continued...

Zimmermann provides leadership for the Mid-Atlantic Nutrition Conference and is the treasurer of the Maryland Feed Industry Council that supports this educational program. He teaches Commercial Poultry Production, Avian Physiology, and Animal Food Safety and Processing. He is active in many Delmarva Poultry Industry activities including the annual Chicken Festival and the Delmarva Poultry Conference. Zimmermann serves as the Superintendent of the Maryland 4-H Poultry Judging Contest and is active on a Small Flock Owner Educational Program. He has been active in regional activities including the Mid-Atlantic Cooperative Extension Program on Practical Biosecurity and on Western- and Southern Multi-State USDA Projects focused on poultry water quality issues. His library contains all published volumes of Poultry Science (PS), World's Poultry Science Journal, British Poultry Science, and the Journal of Applied Poultry Science (JAPR). Zimmermann has been a PSA member since 1973 and has published 54 manuscripts and abstracts in PS or JAPR. He is past secretary/treasurer of PSA and has been active on many PSA committees including: Departmental Status, Professional Development, Animal Care and Poultry Welfare, and Environmental Quality (twice). Zimmermann is past PSA liaison to CAST and served on the FASS Committee on Environment, Waste Management, and Ecosystems. He has served as an Associate Editor for PSA and is currently on the Editorial Review Board for JAPR. . Zimmermann is past president of the American Poultry Historical Society and remains active as Chair of the Poultry Hall of Fame Award committee.

#### Dr. Lisa Taneyhill awarded NSF Grant

r. Lisa Taneyhill has received a 3-year award from the NSF for \$500,000 entitled "Molecular mechanisms underlying Snail2mediated neural crest cell migration." The neural crest is a transient population of migratory cells that gives rise to a diverse array of cell types in the developing embryo. These cells initially exist in the future central nervous system as adherent, premigratory neural crest cells, and then undergo an epithelial-to-mesenchymal transition (EMT), mediated in part through the activity of the protein Snail2, which facilitates their emigration. Intriguingly, this EMT is remarkably similar to that which occurs during cancer cell metastasis, and thus the neural crest provides a tractable model for studying phenomena underlying metastasis. Migratory neural crest cells eventually differentiate to form the craniofacial skeleton, sensory neurons and glia, skin pigment cells, and portions of the heart. Because of the contribution of neural crest cells to multiple embryonic structures, defects in neural crest formation can have drastic developmental consequences, including the onset of various human diseases, syndromes and cancers. This grant will support scientific research in the Taneyhill lab aimed at identifying genes regulated by Snail2 during neural crest cell EMT. In turn, these genes will serve as potential therapeutic targets for the prevention of cancer cell metastasis and other diseases and disorders that affect human health.



### fall 2010

## Faculty News



## Dr. Woods named "Outstanding Mentor"

Dr. Curry Woods was recently the recipient of the University of Maryland GEMSTONE Program's "Outstanding Mentor Award." The GEMSTONE Program is a multidisciplinary four-year research program for select undergraduate students of various majors. The program primarily focuses on science and technology and its role in society. Join us in congratulating Dr. Woods for this special recognition.

## Student News

# Congratulations to our Class of 2010 December graduates!

Campbell, Tricia June Cutaia, Meredith Delhierro, Salvador Steven Flanigan, Timothy Steven Freeman, Ashley Dhawn Hancock, Molly Anne Heller, Joanne Marie King, Patricia J.C. Morgan, Anna Kate Noe, Laura E.



#### Maryland Racing Media Association Scholarships

ANSC Undergraduate, Lauren Mundy, was recently awarded a \$3000 Eddie McMullen Memorial Scholarship from Maryland Racing Media Association (MRMA) at their annual Crab Feast. Lauren has completed 92 credits and carries a 3.55 GPA at the University of Maryland, where she is pursuing a bachelor's degree in animal science. She works in the barn of trainer Ben Feliciano Jr., helping out wherever needed. This summer, to gain hands-on experience for an expected venture into veterinary school. Congratulations, Laura!

Other winners of MRMA scholarships were graduate student, Nicole Fiorellino: \$2,500 and undergraduate, Annelise Myers: \$500



## Student News



#### Laura Ellestad receives Certificate of Excellence

Laura Ellestad, graduate student in Dr. Tom Porter's laboratory, received a Jones-Hamilton Co. Graduate Student Travel Award (\$1000) to attend the Joint Annual Meeting of ADSA-PSA-AMPA-CSAS-ASAS in Denver, Colorado, July 11 - 15, 2010. At the meeting, she was awarded a Certificate of Excellence for presenting the paper entitled "Ras-dva is a novel Pit-1 and glucocorticoid-regulated gene in the developing anterior pituitary gland" in the Physiology and Endocrinology section.

#### Umang Agarwal awarded NESUG Scholarship

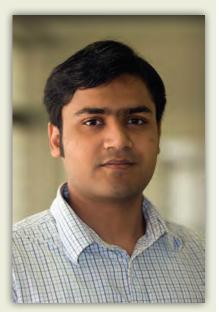
Congratulations to Umang Agarwal for being selected to receive a Northeast SAS Users Group Student Scholarship

(http://www.nesug.org/). Umang is undertaking his PhD research under the mentorship of Dr Brian J Bequette in the Animal and Avian Sciences Department. The scholarship pays for Umang to attend the NESUG conference at the Renaissance Hotel in Baltimore, Maryland from November 14-17, 2010.

### ANSC Undergrad, Amanda Heilman, spends a semester abroad

Senior Amanda Heilman is doing a semester abroad in Tasmania this Fall. She is working as an intern at the Shoestring Dairy. Amanda is featured in an article from Progressive Dairyman magazine on 2010 Summer Dairy Interns.

http://www.progressivedairy.com/index.php?option=com\_content&view=article&id=4726:dairy-intern-amanda-heilman&catid=74:students&Itemid=117



## Extension News

Maryland 4-H Dairy Judging earns 30th National Championship

#### By ANDREA HOOD-HAINES

MADISON, Wis. -- This year's World Dairy Expo marked the 30th overall team win for the Maryland 4-H Dairy Judging program. Maryland has achieved the first place position for one-third or 30 out of 91 recorded contests; this rare accomplishment is equivalent to winning 15 super bowl games!

The winning national team announced at the awards ceremony on Monday, September 27th consists of Kaitlyn Corbett of Williamsport, Hannah Hood of Union Bridge, Jessica Sentelle of Jefferson and Jason Zimmerman of Littlestown, Pa. coached by Jeff Semler, University of Maryland Extension and Kiera Finucane, University of Maryland. The team was first overall in the contest, first in Brown



Swiss and first in Jersey cattle. The Maryland team was also at the top position in reasons. During the past 45 recorded years, Maryland has accomplished a win in reasons 15 times.

"The program would not be as strong as it is today without the support and help from volunteers," commented Kiera Finucane. "The work that goes into taking these youth participants to practices, including countless hours logged in the preparation of judging classes to perfecting oral reasons techniques, is time consuming. The program's long term success and viability is possible only through the time, effort and financial support of the entire dairy industry in Maryland." Many inspiring coaches and volunteers on both the county and state levels have given the program great opportunity. Coaches like the late John L. Morris and Dr. Lee Majeskie gave participants a competitive edge by training them to focus and believe in themselves. Support for the program is still strong today and was proved with an ice cream social as past Maryland team members and friends were honored this year at the Maryland State Fair. Guests gathered for a dairy treat, slide show and old stories.

The next step for the winning team is to travel to Europe for a judging contest. This is a "once in a life-time experience" for the top three overall national teams of Maryland, Michigan and Virginia. If you would like to make a donation to the trip fund or would like additional information on the 4-H Dairy Program, please contact Kiera Finucane at kieraf@umd.edu or (301)405-1392.

## Extension News

### Maryland State Fair Wrap-up

Timonium, MD - The Maryland State Fair presented the department with the opportunity to work with the CMREC Dairy Herd, the State Fair Birthing Center and countless 4-H Contests over the "11 Best Days of Summer." Our students gained experience in educating the general public about the practices and benefits of production agriculture while our staff and faculty worked to create educational experiences for students, 4-H members and the public. One such event was the 4-H and FFA State Dairy Judging Contest. The one hundred and twenty youth contestants evaluated ten classes of cattle and ranked them on their confirmation to breed standards. The quality of the dairy cattle in Maryland is known nation-wide and this year 150 people from collegiate, junior college and 4-H teams from around the country traveled to participate in the contest. Dairy judging provides youth an opportunity to learn public speaking, leadership, analytical skills and most of all how to work together as a team. These skills serve the 4-H members well after their career in 4-H has come to an end. This was showcased at the first ever Dairy Judging Ice Cream Social and Reunion held following the

naming of Supreme Champion of the open dairy cattle show. Memorabilia was on display from teams dating back to the 1920s and many alumni traveled to Timonium specifically to share stories of past accomplishments and encourage today's youth to continue pursuing this worthwhile activity.

By all accounts, the 2010 Maryland State Fair was a great success! Two outstanding teams of 4-Hers were selected to represent Maryland at National Contests this fall and we look forward to sharing in their successes!

# Staff News

### Dr. Carine White receives NIH NRSA fellowship

Dr. Carine White from Dr. Iqbal Hamza's research group received the prestigious NIH NRSA F32 postdoctoral fellowship in her first try. The grant titled "Mechanisms of Heme Transport in Macrophages" is funded for 3 years by NIDDK. Dr. White joins her fellow postdoc Dr. Scott Severance who was also funded by a NIH NRSA fellowship.



# Alumni News



ANSC alumnus, Linda Parkinson, paints her passion

Linda Parkinson, of California has become a published artist after originally pursuing an education in the sciences. She received her bachelors degree in Animal Science from the University of Maryland and conducted her postgraduate studies in wildlife rehabilitation at Humboldt State University. Her true passion since childhood has been art inspired by wildlife. Take a moment to view her work at http://www.lindaparkinson.com



Justin Maxwell, the Grand Slam alumnus

ANSC alumnus, Justin Maxwell, has taken a very unique career path with the Washington Nationals. Justin may not be working in the realm of Animal Science, but nevertheless, he is making headlines! He was recently featured in the Washington Post for an outstanding performance against the Atlanta Braves.

http://www.washingtonpost.com/wp-dyn/content/article/2010/09/15/AR2010091504546.html

#### For the Love of the Land

Recently, one of our Alumni was featured in the Washington Post. Read the fascinating story about Jim Brownell (Class of 1939), and his career as a dairy farmer at Whitehall, one of the Virginia Piedmont's largest agricultural enterprises.

http://www.washingtonpost.com/wp-dyn/content/article/2010/11/19/AR2010111906556.html

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